

Amendments to the Claims

A complete list of pending claims follows, with indicated amendments:

1. (Currently Amended) A method of scheduling a manufacturing line, comprising:
generating a work schedule and a material delivery schedule in response to an outstanding customer order that includes at least one item, wherein the step of generating the work schedule includes the step of scheduling work to manufacture each item by an operation on a manufacturing line, wherein the step of generating the work schedule comprises adding work to the work schedule, wherein the step of generating the delivery schedule includes the step of scheduling a delivery of material to manufacture each item, wherein the scheduling of the delivery includes scheduling the delivery of the material prior to the time the material is needed according to the work schedule, and wherein the step of generating the material delivery schedule comprises adding the delivery of the material from an available inventory of material to an operation of at least one operation on a manufacturing line to the material delivery schedule, wherein the available inventory of material includes a hub inventory; wherein:

the step of adding the work to the work schedule comprises adding the work to the work schedule at a start time; and

the step of adding the delivery to the material delivery schedule comprises adding the delivery to the material delivery schedule at a material delivery time prior to the start time;

assigning the manufacturing line to the outstanding customer order;

providing the work schedule to the manufacturing line, substantially immediately after generating the work schedule, for initiating work to mass produce each item according to the work schedule;

providing the material delivery schedule for the delivery of the material to manufacture each item according to the material delivery schedule, wherein the material delivery schedule is based, at least in part, on in-transit inventory;

wherein one or more items are manufactured on the manufacturing line according to the work schedule; and

obtaining the hub inventory according to the material delivery schedule, wherein the hub inventory is obtained from at least one external material source and is delivered directly to the manufacturing line.

2. (Previously Amended) The method of claim 1, wherein the scheduling of the delivery of the material prior to the time the material is needed according to the work schedule includes scheduling the delivery of the material at most one repetition prior to the time the material is needed.

3. (Previously Amended) The method of claim 1, wherein the material is delivered from an available inventory of material at a material source.

4. (Previously Amended) The method of claim 2, wherein the available inventory includes at least one of a group consisting of the following:

an in-house inventory; and

an external inventory.

5. (Previously Amended) The method of claim 4, wherein the external inventory includes at least one of a group consisting of the following:

a supplier inventory; and

a hub inventory.

6-7. (Cancelled)

8. (Cancelled)

9. (Previously Amended) The method of claim 1, further comprising:

determining an expected availability of the identified material from the available inventory; and

wherein the step of adding the work to the work schedule includes adding the work at a start time after the expected availability of the identified material.

10-11. (Cancelled)

12. (Previously Amended) The method of claim 1 wherein the step of adding the work to the work schedule comprises adding the work to the work schedule according to a priority of the customer order.

13. (Previously Amended) The method of claim 1 wherein the step of adding the work to the work schedule comprises adding the work to the work schedule according to an order date of the customer order.

14. (Previously Amended) The method of claim 1 wherein the item is a commodity.

15-70. (Cancelled)